

UK Patent Application GB 2 276 417 A

(43) Date of A Publication 28.09.1994

(21) Application No 9304958.3

(22) Date of Filing 11.03.1993

(71) Applicant(s)

John Herbert Gevaux
151 Hornchurch Road, HORNCHURCH, Essex,
RM12 4SZ, United Kingdom

(72) Inventor(s)

John Herbert Gevaux

(74) Agent and/or Address for Service

Bout Wade Tenant
27 Furnival Street, LONDON, EC4A 1PQ,
United Kingdom

(51) INT CL⁵
E05D 5/04

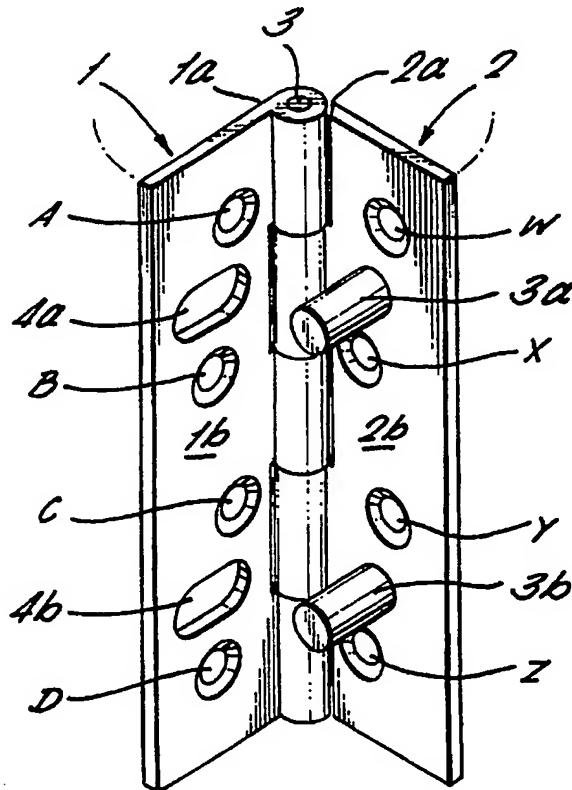
(52) UK CL (Edition M)
E2F FPX

(56) Documents Cited
GB 2127892 A GB 1402487 A

(58) Field of Search
UK CL (Edition L) E2F FCK FED FPX
INT CL⁵ E05D

(54) Security hinge

(57) The present invention provides with reference to the accompanying figure, a hinge comprising two hinge plates (1, 2) hinged together along adjacent edges (1a, 2a), at least one projection (3a, 3b) extending from the face (2b) of one plate (2), at least one aperture (4a, 4b) in the face (1b) of and extending through the other plate (1), each projection (3a, 3b) being received by an aperture (4a, 4b) when said faces of the two plates (1, 2) are brought together.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

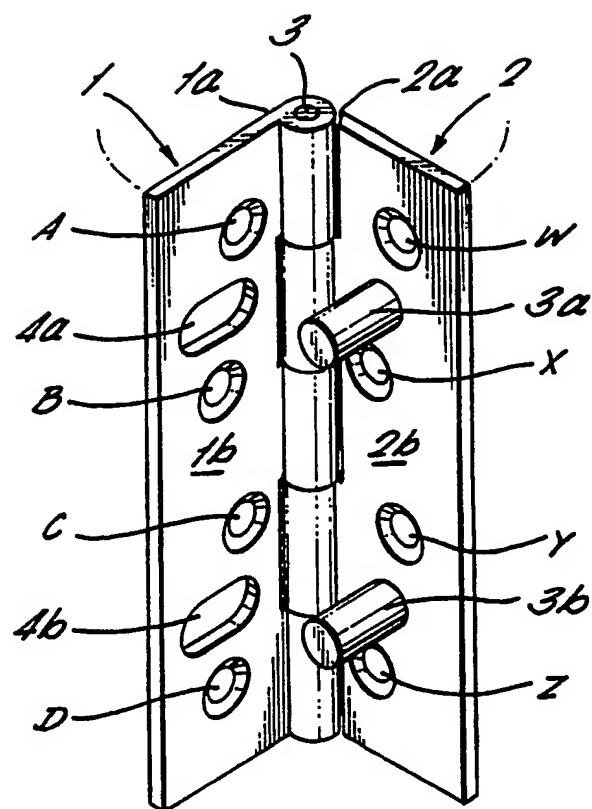
The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1990.

BEST AVAILABLE COPY

GB 2 276 417 A

1/1



The present invention relates to hinges, and more particularly to hinges offering improved security to doors and the like.

In order to prevent doors being opened by removing the hinge pin or being prised open by crowbars and the like, it is common practice to place security bolts or projections along the hinged edge of a door which engage into holes set in the door frame when the door is closed. Not only do these present a cost in addition to the hinges, but they take time to fit over and above the fitting of the hinges. The invention seeks to provide a hinge which includes a security bolt which reduces such extra costs and fitting time.

According to the present invention there is provided a hinge comprising two hinge plates hinged together along adjacent edges, at least one projection extending from the face of one plate, at least one aperture in the face of and extending through other plate, each projection being received by an aperture when said faces of the two plates are brought into engagement.

Preferably the or each projection is cylindrical, and the or each aperture is circular to receive the cylindrical projection.

Preferably the projection is of metal.

The invention will now be described with reference to the accompanying drawing which shows a side elevation of the hinge .

Referring to the drawing a hinge is formed from two hinge plates 1 and 2. Adjacent edges 1a,2a of the hinge plates are hinged together around a pin 3 (as is normal in the art). Hinge plate 1 has a plurality of holes (A,B,C,D) for receiving screws. Similarly hinge plate 2 has a plurality of holes (W,X,Y,Z) for receiving screws.

Extending from one face 2b of hinge plate 2 are two cylindrical projections 3a,3b. In face 1b and extending through hinge plate 1 are two apertures 4a,4b substantially equal to the outside diameter of projections 3a,3b. The apertures 4a,4b are positioned so that they receive the projections 3a,3b when the two faces 1b,2b of hinge plates 1 and 2 are brought together.

In use of the invention two or more of the above described hinges are used to hinge a door to a door frame. Hinge plate 2 is secured to the door, and hinge plate 1 is secured to the door frame. When the door is closed, the projections 3a,3b engage in corresponding apertures 4a,4b. If it is attempted to open the door by removing pin 3, the hinged side of the door is held in place by the projections in the apertures.

If desired, each projections may have a chamfered edge to give it sufficient clearance to enter its corresponding aperture when the two plates are brought together. Alternatively, each aperture may be larger than the dimensions of its corresponding projection to create sufficient clearance.

Preferably the projection is made of metal, and
preferably the hinge is also made of metal.

It will be seen that any stress placed upon the
aperture by the projection is distributed over the
entire hinge plate 1. This provides good security.

Further modifications will be apparent to those
skilled in the art without departing from the scope of
the present invention.

CLAIMS:

1. A hinge comprising two hinge plates hinged together along adjacent edges, at least one projection extending from the face of one plate, at least one aperture in the face of and extending through the other plate, each projection being received by an aperture when said faces of the two plates are brought together.
2. A hinge as claimed in Claim 1 wherein the or each projection is cylindrical.
3. A hinge as claimed in Claim 1 or Claim 2 wherein the or each aperture is of a cross-sectional area larger than the cross-sectional area of the or each corresponding projection.
4. A hinge as claimed in any one of the preceding claims wherein the or each projection has a chamfered edge.
5. A hinge as claimed in any one of the preceding claims wherein the or each projection is of metal.

Patents Act 1977**Examiner's report to the Comptroller under
Section 17 (The Search Report)**

Application number

GB 9304958.3

-5-

Relevant Technical fields

(i) UK CI (Edition L) E2F (FCK FED FPX)

(ii) Int CI (Edition 5) E05D

Search Examiner

S J CHURCH

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

22 JULY 1993

Documents considered relevant following a search in respect of claims 1-5

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2127892 A (PARSONS) whole of document	1-5
X	GB 1402487 A (N V TOOLS) see page 2 lines 77-107	1-5



Category	Identity of document and relevant passages - 6 -	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.